REMARKS

Administrative Overview

In the Office Action mailed on May 8, 2007, claims 1, 2, 5, 6, 8–18, 20, and 22–26 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,329,984 to Boss et al. (hereinafter "Boss"), and claims 3, 4, 7, 19, and 21 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Boss.

The Applicants hereby amend claims 1–13 and 26. Support for the claim amendments can be found throughout the specification, the drawings, and the claims as originally filed. No new matter is introduced by these amendments. After entry of the claim amendments, claims 1–26 will be pending in this application. Accordingly, the Applicants respectfully request reconsideration of claims 1–26 in light of the amendments made above and the arguments presented below, and the withdrawal of all rejections.

The Examiner's outstanding rejections are addressed in the order in which they appear in the Office Action.

Interview Summary

The undersigned thanks the Examiner for his time and courtesy during the telephonic interview that took place on September 4, 2007. The undersigned notes that the discussion focused on the amendments and arguments presented herein. Accordingly, this paper is intended to constitute a proper recordation of the interview in accordance with MPEP § 713.04, and also to provide a full response to the Office Action mailed on May 8, 2007.

Claims 1, 2, 5, 6, 8–18, 20, and 22–26 are Patentable over Boss

Claims 1, 2, 5, 6, 8–18, 20, and 22–26 are rejected under 35 U.S.C. § 102(b) as being anticipated by Boss. The Applicants respectfully traverse this rejection as applied to the claims.

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. See, MPEP § 2131. The Applicants respectfully submit that Boss fails to meet this exacting standard as applied to Applicants' independent claims 1, 14, and 26.

In general terms, Applicants' invention relates to methods and systems for synchronizing, in a bandwidth-adaptive manner, a consumer node representation of a dynamic data set with a source node representation of the dynamic data set. Specification at para. [0001]. To enable the bandwidth-adaptive synchronization of the dynamic data sets, the methods and systems of Applicants' invention transmit both data packets representing the current state of the source node dynamic data set and metadata information. Specification at para. [0036], [0038], and [0040]. The metadata information identifies each data packet representing the current state of the source node dynamic data set. Specification at para. [0039]. Because of this, each data packet representing the current state of the source node dynamic data set need not be sent on every transmission to the consumer node. Rather, on each transmission to the consumer node, only the metadata information and the data packets representing the current state of the source node dynamic data set that were not previously transmitted to the consumer node need to be sent. More specifically, data packets responsive to the metadata information that were not previously transmitted to the consumer node are selected for transmission to the consumer node. Specification at para. [0040] and [0042]. The consumer node is then able synchronize its data set

with the source node's data set by employing the data packets identified in the metadata information.

Accordingly, one advantageous feature of the invention is the bandwidth-adaptive synchronization of dynamic data sets. With reference to FIG. 3 of Applicants' application, a consumer node 150'' that communicates over a low-bandwidth connection may receive data packets and metadata information less frequently than (and, thus, fewer data packets in total than) a consumer node 150 that communicates over a high-bandwidth connection. More specifically, as illustrated in FIG. 3, consumer node 150 receives metadata packets 310, 320, and 330 and data packets 0, 1, 2, 3, 4, and 5, while consumer node 150'' only receives metadata packets 310 and 330 and data packets 0, 1, 2, 4, and 5. Data packet 3 is not transmitted to consumer node 150''. See Specification at para. [0042] and FIG. 3. Nevertheless, because the consumer node 150'' receives the metadata information that identifies each data packet representing the current state of the source node dynamic data set (*i.e.,* metadata packet 330 identifying data packets 0, 4, and 5), the consumer node 150'' is still able to correctly synchronize its data set with that of the source node 100. Specification at para. [0042]. Accordingly, use of the metadata information enables communications with the consumer nodes 150, 150'' to be performed in a bandwidth-adaptive manner.

As also illustrated in FIG. 3 of Applicants' application, following the transmission of metadata packet 330 to consumer node 150'', data packets 4 and 5 are transmitted thereto. In contrast, following the transmission of metadata packet 330 to consumer node 150, only metadata packet 5 is transmitted thereto, as metadata packet 4 was previously transmitted to the consumer node 150 (i.e., following the transmission of metadata packet 320). Thus, in one embodiment, data packets responsive to the metadata information are selected for transmission to

the consumer node so long as they were not previously transmitted to the consumer node. See Specification at para. **[0042]** and FIG. 3.

Each of Applicants' independent claims 1, 14, and 26 includes at least one limitation directed towards these uses of metadata information to enable communications with consumer nodes to be performed in a bandwidth-adaptive manner. For example, independent claim 1 recites, in part:

"receiving, from the source node, **metadata information identifying at least one data packet representing a current state of local display data;** . . .

selecting at least one of the received data packets responsive to the received metadata information;

transmitting to a consumer node the metadata information; and

transmitting to the consumer node the selected at least one data packet" (emphasis added).

Independent claim 14 recites, in part:

"a source node configured to . . . create at least one **metadata packet identifying the at least one data packet representing the change in local display data**, and . . .

a communications service in communication with the source node, the communications service configured to **select one of the at least one metadata packet and the at least one data packet for transmission to a first consumer node**" (emphasis added).

Independent claim 26 recites, in part:

"receiving, from the source node, first **metadata information identifying a first at least one data packet representing a first state of local display data** . . .

receiving, from the source node, second **metadata information identifying a second at**

least one data packet representing a second state of local display data . . .

generating **third metadata information . . . identifying a third at least one data**

packet [and]

transmitting to a consumer node the third metadata information" (emphasis added).

Boss, in distinct contrast to Applicants' claimed invention, does not describe employing

metadata information or metadata packets that identify at least one data packet representing a

state of, or a change in, local display data, as is required by each of the Applicants' independent

claims. For example, the passages of the Boss patent cited by the Examiner relate to creating a

list of windows open on a host computer system 14, indicating which of those open windows are

shared between the host computer system 14 and the client computer system 11, creating a

communication packet containing the window list, and transmitting the communication packet

from the host computer system 14 to the client computer system 11 so that the client computer

system 11 may draw a censor region on its display device. See, Boss at col. 7, ln. 54 to col. 8, ln.

58; and at FIGS. 8, 9a, and 9b. Boss does not, however, teach or suggest anywhere in this

passage, or anywhere else, employing metadata information or metadata packets to identify at

least one data packet representing a state of, or a change in, local display data. The Examiner

seems to suggest that by marking a window in the list as shared or unshared metadata

information is created, but, even if this were true, such "metadata information," as termed by the

Examiner, does not identify at least one data packet representing a state of, or a change in, local

display data, as is recited by each of the Applicants' independent claims 1, 14, and 26.

Because Boss does not describe employing metadata information that identifies at least

one data packet representing a state of, or a change in, local display data, Boss necessarily can

not, and does not, describe "selecting at least one of the received data packets responsive to the received metadata information," as is required by Applicants' independent claim 1.

Moreover, Boss does not describe "a communications service in communication with the source node, the communications service configured to select one of the at least one metadata packet and the at least one data packet for transmission to a first consumer node," where both the metadata packet and the data packet were created by the source node, as is required by Applicants' independent claim 14. Rather, Boss only describes that a communication packet is transmitted from a host system to a client system. See, e.g., Boss at col. 4, ln. 64 to col. 5, ln. 11; col. 5, ln. 33–39; and col. 8, ln. 26–29.

Accordingly, the Applicants respectfully submit that Boss fails to teach or suggest all of the elements present in any one of the Applicants' independent claims 1, 14, or 26. Therefore, the Applicants respectfully submit that independent claims 1, 14, and 26, and claims 2, 5, 6, 8–13 15–18, 20, and 22–25, which depend either directly or indirectly from either independent claim 1 or 14, are patentable over Boss. Accordingly, the Applicants respectfully request that this ground of rejection be reconsidered and withdrawn.

Claims 3, 4, 7, 19, and 21 are also Patentable over Boss

Claims 3, 4, 7, 19, and 21 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Boss. The Applicants respectfully traverse this rejection as applied to the claims.

To demonstrate a prima facie case of obviousness, all of the limitations of the claim at issue must be taught or suggested by the prior art reference(s) relied upon in support of the rejection. See, MPEP § 706.02(j) and § 2143. For at least the reasons set forth above, the Applicants respectfully submit that Boss does not teach or suggest all of the limitations of either Applicants' independent claim 1 or 14, and therefore does not legally establish a prima facie case

of obviousness of claims 3, 4, 7, 19, and 21, which depend, either directly or indirectly, from either independent claim 1 or 14. Therefore, the Applicants respectfully submit that claims 3, 4, 7, 19, and 21 are also patentable over Boss, and respectfully request that this ground of rejection be reconsidered and withdrawn.

CONCLUSION

In light of the foregoing, the Applicants respectfully submit that all of the pending claims are in condition for allowance. Accordingly, the Applicants respectfully request reconsideration, withdrawal of all grounds of rejection, and the allowance of all the pending claims in due course.

If the Examiner believes that a telephone conversation with the Applicants' attorney would be helpful in expediting the allowance of this application, the Examiner is invited to call the undersigned at the telephone number identified below.

Respectfully submitted,

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